SECTION 09651

RESILIENT TILE FLOORING

PART 1 GENERAL

1.1 SUMMARY

A. Scope
   1. Provide resilient flooring work as shown, scheduled, or specified, complete with accessories and trim for a finished installation.

B. Related Work Specified In Other Sections:
   1. Rough Carpentry - Division 6.

1.2 QUALITY ASSURANCE

A. Requirements Of Regulatory Agencies
   1. Fire Hazard Classification: Resilient flooring materials, where so specified hereinafter, shall have maximum rating of 75 for flame spread, and less than 450 for smoke development when tested per ASTM E 662 and shall have a Critical Radiant Flux (CRF) rating of 0.45 watts/sq. cm. or more when tested per ASTM E 648.

B. Testing Agency
   1. Retain the services of an Owner-approved testing agency to perform required electrical resistance tests on the installed static-conductive flooring.

1.3 SUBMITTALS

A. Furnish submittals for items that are identified in this Section by a different typeface and a bracketed code (e.g., *Item [L]*). Refer to Division 1 General Requirements for definition of codes for types of submittals and the administrative requirements governing submittal procedure. Additional submittal requirements pertaining to this Section are specified herein under this Article.

B. Submit product data for resilient flooring material where specified.

C. Submit samples of any substitute resilient flooring materials that are not specified.

D. Test Report: Submit to show that static-conductive flooring installation complies with requirements of REGULATORY AGENCY under QUALITY ASSURANCE.

1.4 OPERATION AND MAINTENANCE DATA

A. Submit maintenance data for care and cleaning of resilient flooring materials per Division 1 requirements.

1.5 MAINTENANCE MATERIALS (EXTRA STOCK)

A. Furnish to the Owner extra materials for maintenance purposes of each material provided, of same lot, run or batch used, including but not limited to the following:
   1. Floor Tile: Not less than 2% (to the nearest full carton) of the amount of each type and color installed.
   2. Resilient Base: One full carton (24 pieces) of each type and color.

1.6 PRODUCT STORAGE

A. Deliver products to the Project site in manufacturer's original, unopened cartons and containers, each bearing names of product and manufacturer, Project identification, and shipping and handling instructions.

B. Store products in dry spaces protected from the weather, with ambient temperatures maintained between 50 and 90 degF (10 an 32 degC).

C. Move products into spaces where they will be installed at least 48-hours before installation, unless longer conditioning periods are recommended in writing by the manufacturer.

1.7 PROJECT CONDITIONS

A. Environmental Requirements
   1. Rooms or areas scheduled to receive resilient flooring shall be continuously maintained at not less than 70 degF from at least 48 hours prior to installation to at least one week after installation.

B. Protection
   1. Protect completed work from traffic and damage with durable temporary coverings. Do not allow traffic during first 24 hours after installation of resilient flooring materials.

C. Sequencing, Scheduling
   1. Do not start installation of resilient flooring until other finish work, including painting, has been completed in each room or area.

PART 2 PRODUCTS

2.1 MATERIALS

A. Tile
   1. *Vinyl-Composition Tile [P]*: Face size 12 inch x 12 inch, 1/8 inch thick, per ASTM F1066, Composition 1, Class 2, of contract or architectural series of marbleized pattern extending through entire body of tile. Provide tile to match colors/patterns specified in Finish Schedule. Provide tile having fire hazard classifications specified in REQUIREMENTS OF REGULATORY AGENCIES.
      a. Armstrong "Standard and Premium Excelon.

b. Azrock “Custom Cortina”, “Futura”, and “Classics” series.
c. Mannington.
d. Tarkett “Expressions”.

B. Resilient Base
1. *Vinyl Resilient Base [P]*: 4 inch high by 0.080 inch or 1/8 inch thick, conforming to ASTM F1861, Group 2, Type TV, straight Style A non-cove type in carpeted areas and cove Style B in all other rooms and areas, with rough top, in colors to match those specified in Finish Schedule. Provide manufacturer’s standard preformed corner units to match base.
a. Armstrong “Vinyl Base”.
b. Flexco “Vinyl Base”.
c. Johnsonite “Vinyl Wall Base”.
d. Mercer Plastics Co., “Standard Vinyl Wall Base”.
e. Roppe, “Vinyl Base”.

C. Miscellaneous
1. *Resilient Flooring Feature Strips [P]*: Solid standard color selected, face width 1 inch unless noted otherwise, 1/8 inch thick, of vinyl composition, homogenous vinyl or rubber.
a. Armstrong “Excelon Feature Strips”
b. Azrock “Vinyl Composition Feature Strip”
c. Mannington “Vinyl Composition Feature Strip”
d. Mercer “643 Vinyl Feature Strip”
2. *Resilient Flooring Reducer Strips [P]*: Solid standard color selected, face width 1 inch or 1-1/4 inch, 1/8 inch thick tapered to floor on opposite edge, of homogeneous vinyl or rubber.
a. Azrock “Vinyl Composition Edging Strip”
b. Flexco “92 Vinyl Reducer Strip”
c. Johnsonite “CB-XX-C Reducer Strips”
d. Mercer “633 Tile Reducer”
e. Roppe “22”
3. *Resilient Flooring Thresholds [P]*: Solid standard color selected, 5-1/2 inch full width, 2-3/4 inch half width, 1/2 inch high tapered to 1/4 inch at edge, homogeneous vinyl or rubber.
a. Johnsonite “VT1-XX” full width, “VT2-XX” half width
b. Mercer “683”, full saddle, half saddle
c. Roppe “33” full, “32” half
4. Adhesives: Approved waterproof adhesives and cements of brands and types recommended and guaranteed by the approved resilient materials manufacturers for application of resilient materials to the various types of surfaces to be covered.

5. Cleaning and Waxing Materials:

Hillyard Chemical Co.	“Super Shine-All” cleaner,
	“Hil-Tex II” sealer, and
	“Super Hil-Brite” wax
Huntington Laboratories,	In“Hawk” cleaner,
	“Umbrella” sealer, and
	“Umbrella Contrast” wax
Vestal Laboratories	“Briten All” cleaner,
	“Sealer 5” sealer, and
	“Style” wax

6. Underlayment Material: Latex type as recommended by the resilient flooring manufacturer, for patching defects in substrates to receive resilient flooring material.
   a. Armstrong “Latex Underlayment S-180”
   b. Azrock “Latex Underlayment”
   c. Mannington “Latex Underlayment”

PART 3 EXECUTION

3.1 PREPARATION

A. Clean and prepare surfaces as required to receive adhesives and resilient materials. Remove all surface contaminants that would prevent bonding of resilient materials. Remove all dirt, loose and scaly surfaces, mortar and plaster droppings, surface projections and unsound areas.

B. Fill all cracks, holes and low spots to produce a smooth, even surface; use specified manufacturer’s approved latex underlayment.

C. Provide Calcium Chloride test on scheduled concrete slab areas to receive resilient flooring according to ASTM F1869, “Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Sub floor Using Anhydrous Calcium Chloride” to insure concrete slab acceptability. Remove curing agents in and around the test area prior to conducting test. Test results shall fall within flooring manufacturer’s acceptable levels prior to installation.

D. Provide a 72-hour Qualitative Bond Test in a 48-inch by 48-inch area using the specified adhesives. Remove of curing agents, old adhesives, inhibitors, oil and grease in the scheduled area prior to test to assure proper installation.

E. Provide Alkali test on scheduled concrete slab areas to insure concrete slab acceptability. Remove curing agents in and around the test area prior to conducting test. Test results shall fall within flooring manufacturer’s acceptable pH levels prior to installation.

F. Provide waterproof underlayment application where slab fails to meet the tests required prior to installation.

G. Do not proceed with installation until unsatisfactory conditions have been corrected.

3.2 INSTALLATION

A. General
   1. Install all materials as recommended by the manufacturer and per the additional requirements of this Section. Align all joints and lay all joints tight with each finished surface in flush, true plane. Roll or press all materials in place to insure contact with sub-surfaces.

B. Floor Tile
   1. Center each room or area with respect to the principal permanent walls and start laying tile from such centers. Apply adhesive to substrates. Lay tiles to show grain or pattern running in one direction only. Where field pattern does not work out to full units at perimeter, lay out the pattern to provide perimeter units of equal width, but not less than half tile wide. Where tile is same pattern and color for adjacent rooms or areas, continue tile through doorways. At depressed floor covers for embedded utility boxes, fill covers with accurately cut and fitted tile firmly cemented to cover.
   2. Where tiled floor terminates at an untiled floor, install continuous reducer strip.
   3. Install proper type of threshold as scheduled or indicated.
   4. Install static-conductive tile so that completed installation complies with the requirements of NFPA Bulletin No. 56A.

C. Resilient Base
   1. Install resilient base in adhesive on all vertical surfaces scheduled and indicated; continue into all recesses, closets, projections, and on toe spaces of equipment or cabinet items as required. Use longest lengths practicable.
   2. Install preformed corner units at all corners.
   3. Field-form all corners, heating and cooling base as necessary to permanently set the shape; notch and miter cove for inside corners; use long lengths to form corners so as to extend beyond corners as far as possible, but not less than 6 inch from corner.

3.3 FIELD QUALITY CONTROL

A. Not less than one month after installation and final cleaning of conductive resilient flooring, test the electrical resistance to determine if it conforms to the requirements of NFPA 56A. Furnish test equipment and perform the test in accordance with NFPA 56A.

B. Should conductive flooring fail to comply with the requirements of NFPA 56A, remove such flooring and replace with flooring that does comply, all at no cost to the Owner.

3.4 ADJUSTING AND CLEANING

A. Clean adhesives from adjacent finished surfaces as the work progresses; pay all costs incurred if adjacent finished surfaces cannot be cleaned to their original condition and need to be repaired or replaced.

B. Clean all resilient flooring materials upon completion of installation. Apply one coat of sealer and two separate machine-polished coats of wax on all resilient flooring materials, except

rubber products. Apply first coat of wax immediately after cleaning and sealing; apply final coat of wax just prior to occupancy by the Owner.

C. When so directed, or prior to final waxing, adjust and straighten misaligned materials, replace or re-cement loose materials and replace broken, cracked, chipped or scratched materials.

END OF SECTION

Revision History	
Date	**Rev. No.**
A	0
B	0
C	0
D	0
E	0
F	0
02-19-09	0

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